

### **Remarks/Arguments**

Claims 28 to 53, 56 and 57 are pending. Claims 28, 30, 33, 36, 37 and 48 to 51 have been amended. Claims 56 and 57 are new. Claims 54 and 55 have been cancelled.

Claim 28 has been amended to recite that, as a result of the shock-like cooling, the crystal grains in this outer surface area have an “extremely small size”. New Claim 57 has the same limitation. This claim limitation finds support on page 4, lines 3 to 9.

Claim 56 has been amended to recite that, as a result of the shock-like cooling, essentially suppressed after-crystallization in the outer surface of the plastic coating is achieved. This claim limitation finds support in the original Abstract, lines 12 to 16, 22 and 23. Claim 56 has also been amended to recite that, as a result of the shock-like cooling, after-crystallization is reduced so that a mainly amorphous structure of the outer surface of the plastic coating is obtained. This claim limitation finds support on page 3, lines 12 to 15.

Claim 57 has been amended to recite that, as a result of the shock-like cooling, after-crystallization is reduced so that a substantially amorphous structure of the outer surface of the plastic coating is obtained. This claim limitation finds support on page 3, lines 34 to 38.

Pursuant to the provisions of 37 CFR 41.50(b)(2004), Claims 28 to 55 have been rejected by the Board under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the appellants regard as their invention. Appellants traverse this rejection.

Examination of claims under 35 U.S.C. 112, second paragraph, according to Section 2173.02 of the M.P.E.P., (Rev.3), requires:

“Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

(A) The content of the particular application disclosure;

(B) The teachings of the prior art; and

(C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.”

[Emphasis Supplied]

Nowhere in the Board’s decision did the Board factually determine in the record the level of ordinary skill in the art. Hence, the Board has not made a viable rejection because there is no way that the Board could know or ascertain the claim interpretation that would be given by one ordinarily skilled in the art.

The Board’s decision stated: that a principal purpose of the second paragraph of Section 112 is to provide those who would endeavor, in future enterprises, to approach the area circumscribed by the claims of a patent, with adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance; and see In re Hammack, 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970). The Board’s decision failed in carrying out the requirements of the mandatory analysis so the Board cannot have ascertained if the so-called “principal purpose” has not been met.

Appellants believe that their claims meet the principal purpose of the second purpose.

The Office Action stated that, as the court stated in In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238, (CCPA 1971), of whether the claims of an application satisfy the requirements of the second paragraph of 112 it is:

[T]o determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. It is here where the definiteness of language employed must be analyzed – not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. [Footnote omitted.] [Emphasis Supplied]

This quotation is in essence the same as the mandatory analysis requirements, set out in the portion of the M.P.E.P. that appellants quoted above. The Board's decision was defective as it did not factually determine in the record the level of ordinary skill in the art, hence the Board could not ascertain the interpretation by one ordinarily skilled in the art of the teachings of the prior art and appellants' disclosure.

The Board's decision stated that, upon review of appellant's disclosure (which includes Figures 1 and 2), we cannot find a clear depiction of the crystal grains in the outer surface area. Appellants point out that this statement is incorrect. Clear disclosure of the crystal grains being in the outer surface is present. Such crystal grains have an extremely small size (see page 4, lines 8 and 9). This allows one ordinarily skilled in the art to ascertain the boundaries of

protection sought by the claims on appeal. The Board has not factually proven otherwise, even prima facie.

Section 2173.05(b).B. of the M.P.E.P. states:

“The phrase ‘a silicon dioxide source that is essentially free of alkali metal’ was held to be definite because the specification contained guidelines and examples that were considered sufficient to enable a person of ordinary skill in the art to draw a line between unavoidable impurities in starting materials and essential ingredients. *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (CCPA 1983). The court further observed that it would be impractical to require applicants to specify a particular number as a cutoff between their invention and the prior art.” [Emphasis Supplied]

The Board’s decision stated there is no indication of an acceptable size for the crystal grains in the outer surface area. Appellants disagree with this statement. As shown above, appellants’ disclosure reasonably indicates the acceptable size for the crystal grains.

The Board’s decision stated that, as such, it is not possible to determine the size of the grains in the outer surface and whether these grains are “as small as possible,” as presently claimed. Appellants traverse this statement. The Board’s decision did not make the complete analysis required.

The Board’s decision stated that, thus, the claims, as presently written, do not circumscribe the boundaries of the claims with a reasonable degree of particularity with respect to the particular grain size

that is embraced by “as small as possible.” Appellants traverse this statement since the underlying analysis was incomplete.

The Board’s Decision stated that, in light of the above noted inconsistencies in each of the independent claims on appeal, i.e., Claims 28 and 55, the Board was of the view that one of ordinary skill in the art cannot ascertain the boundaries of protection sought by the claims on appeal. Appellants traverse this statement.

The Board (and the Examiner during examination) have not factually determined in the record the level of ordinary skill in the pertinent art. Accordingly, the Board (and the Examiner) cannot know anything concerning one of ordinary skill in the art, let alone what one of ordinary skill in the art can or cannot ascertain. This rejection is defective ab initio, and should have no finding or guiding effect on the Examiner’s action in the situation at bar.

The field of obviousness/nonobviousness is a ready guide on the factual determination of the level or ordinary skill in the pertinent art. Also, for example, see M.P.E.P., (Rev. 3), Section 2141.03 for factors to consider in factually determining the level of ordinary skill in the pertinent art.

Section 2141.1 of the M.P.E.P., (Rev. 3), states:

“Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103. As quoted above, the four factual inquiries enunciated

therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art;
- and
- (D) Evaluating evidence of secondary considerations.”

[Emphasis supplied]

The Foreword of the M.P.E.P., Rev. 3, August 2005, states:

“This Manual is published to provide U.S. Patent and Trademark Office (USPTO) patent examiners, applicants, attorneys, agents, and representatives of applicants with a reference work on the practices and procedures relative to the prosecution of patent applications before the USPTO. It contains instructions to examiners, as well as other material in the nature of information and interpretation, and outlines the current procedures which the examiners are required or authorized to follow in appropriate cases in the normal examination of patent application. The Manual does not have the force of law or the force of the rules in Title 37 of the Code of Federal Regulations.”

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“Examiners will be governed by the applicable statutes, rules, decisions, and order and instructions issued by the Director of

the USPTO and other officials authorized by the Director of the USPTO.” [Emphasis Supplied]

Appellants note that Section 2141.03 of the M.P.E.P., (Rev. 3), states:

“SPECIFYING A PARTICULAR LEVEL OF SKILL IS NOT  
NECESSARY WHERE THE PRIOR ART ITSELF REFLECTS  
AN APPROPRIATE LEVEL”

“If the only facts of record pertaining to the level of skill in the art are found within the prior art of record the court has held that an invention may be held to have been obvious without a specific finding of a particular level of skill where the prior art itself reflects an appropriate level. *Chore-Time Equipment, Inc. v. Cumberland Corp.*, 713 F.2d 774, 218 USPQ 673 (Fed. Cir. 1983). See also *Okajima v. Bourdeau*, 261 F.3d 1350, 1355, 59 USPQ2d 1795, 1797 (Fed. Cir. 2001).” [Emphasis Supplied]

The Examiner (and the Board) does not know the “appropriate level” of the (ordinary) skill in the art that the prior art reflects without the required factual analysis in the record of the prior art to ascertain what level of (ordinary) skill that it reflects.

Webster’s Ninth New Collegiate Dictionary, (1989), states:

“Reflect... 4. to give back or exhibit as an image, likeness, or outlines: mirror...” [Page 989]

The Random House Dictionary, The Unabridged Edition, (1983), states:

“reflect... 2. to give back or show an image of; mirror.... 8. to be reflected or mirrored. 9. to give back or show an image.” [Page 1206]

Webster’s Ninth New Collegiate Dictionary, ibid., states:

“analysis... 2 a: an examination of a complex, its elements, and their relations” [Page 82]

“analyze... 1: to study or determine the nature and relationship of the parts by analysis” [Page 83]

The Random House Dictionary, ibid., states:

“analysis... 2. this process as a method of studying the nature of something or of determining its essential features and their relations:....” [Page 53]

“analyze... 2. to examine critically, so as to bring out the essential elements or to give the essence of:....” [Page 53]

The decision of *Okajima v. Bourdeau*, 59 USPQ2d 1795 (Fed. Cir. 2001), cited in the above-quoted portion of Section 2141.03 of the M.P.E.P., is “a patent interference case concerning the issue of obviousness.” The Federal Circuit Court of Appeals in the *Okajima* decision stated:

“Whether a claimed invention is unpatentable as obvious under 35 U.S.C. § 103 is a question of law based on underlying findings of fact. *In re Gartside*, 203 F.3d 1305, 1316, 53 USPQ2d 1769, 1776 (Fed. Cir. 2000). The underlying factual inquires include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; and (3) the differences



between the claimed invention and the prior art. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 460 (1966)."

[Emphasis supplied] [Page 1797]

"Okajima contends that the Board erred as a matter of law by failing to make any findings of fact regarding the level of skill in the art. As described in *Al-Site Corp. v. VSI International, Inc.* 174 F.3d 1308, 1324, 50 USPQ2d 1161, 1171 (Fed. Cir. 1999), the level of skill in the art is a prism or lens through which a judge, jury, or the Board views the prior art and the claimed invention. This reference point prevents these factfinders from using their own insight or, worst yet, hindsight, to gauge obviousness. *Id.* Skill in the art does not act as a bridge over gaps in substantive presentation of an obviousness case, but instead supplies an important guarantee of objectivity in the process. *Id.* (citing *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718, 21 USPQ2d 1053, 1057 (Fed. Cir. 1991)). While it is always preferable for the factfinder below to specify the level of skill it has found to apply to the invention at issue, the absence of specific findings on the level of skill in the art does not give rise to reversible error 'where the prior art itself reflects an appropriate level and a need for testimony is not shown.' *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163, 225 USPQ 34, 38 (Fed. Cir. 1985), see also *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 963,

1 USPQ2d 1196, 1201 (Fed. Cir. 1986) (excusing failure to make express findings as to the level of ordinary skill where there is no showing that the court's failure to make such a finding influenced the ultimate determination)." [Emphasis supplied] [Page 179]

However, immediately thereafter the C.A.F.C. went on to state:

"In this case, Okajima stated during the final hearing that there was no dispute that the level of skill was high. Where the parties agree that the level of skill in the art is high, any finding by the Board that the proper level of skill is less than that urged by the parties would only reinforce the Board's conclusion of nonobviousness. See *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1574, 230 USPQ 81, 88 (Fed. Cir. 1986) (recognizing that particular findings as to level of skill do not influence the ultimate determination under § 103 where there is a 'determination that an invention would have been *nonobvious* to those of *extraordinary* skill'). Accordingly, we find no harm under the circumstances of this case in the Board's failure to set forth express findings as to the level of skill." [Emphasis supplied] [Page 1797]

The parties in the Okajima decision had agreed that the level of skill in the art was high.

Of interest is headnote number [1] for the Okajima decision, which reads as follows:

"Board of Patent Appeals and Interferences, in concluding the snowboard boot invention is not unpatentable for obviousness, did not err by failing to make findings of fact as to level of ordinary skill in art, since absence of specific findings regarding level of skill in art does not give rise to reversible error if prior art reflects appropriate level, and need for testimony is not shown, since parties in present case agreed that level of skill in art is high, and since any findings by board that proper level of skill is less than that urged by parties would only reinforce board's findings of non-obviousness." [Emphasis supplied] [Page 1795]

The prior art of record in the case at bar may reflect an appropriate level of ordinary skill in the pertinent art, but the Examiner (and the Board) still is faced with the fact that the record does not contain the required factual analysis of the prior art to provide what is the ordinary level of skill in the art. Without the required analysis of the prior art to factually determine the level of ordinary skill in the pertinent art being present, this Section 112, second paragraph, rejection is defective on its face.

Withdrawal of the rejection requested.

Reconsideration, reexamination and allowance of the claims is requested.

Respectfully Submitted,

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Date

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